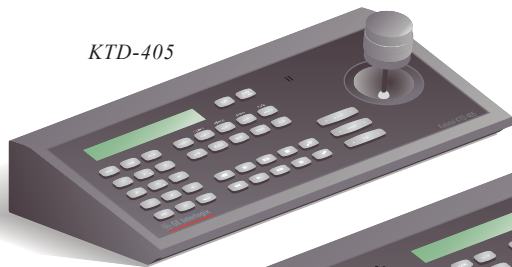# KTD-405/405A Keypad
User Guide

GE Interlogix

Introduction

Welcome to the KTD-405/405A User Guide. This guide helps operators use the KTD-405/405A controller keypads to control cameras, digital recorders, matrixes, and multiplexers.

- Keypad operation is affected by the type of system installation. See pages 2 - 3 for information about Digiplex and Zone installations.
- Commonly used device commands are described on pages 4 - 9.
- For basic keypad descriptions and operations, see pages 10 - 12.
- For basic I/O box cable connections, see pages 13 - 14.
- Use page 15 to record your system device/zone numbers and descriptions.

You can find more detailed information about the keypads and other system devices in their related user manuals.

KTD-405

KTD-405A

Basic Zone Installation / Zone Keypad Mode

If your system uses one or more DVMRe digital video recorders or GE multiplexers as the main switching devices, then the system is a basic **zone installation**. A zone installation can have as many as 32 zones, each zone having one DVMRe or multiplexer that serves from 1 to 32 cameras. The outputs from the zone's switching device connect directly to dedicated monitors.
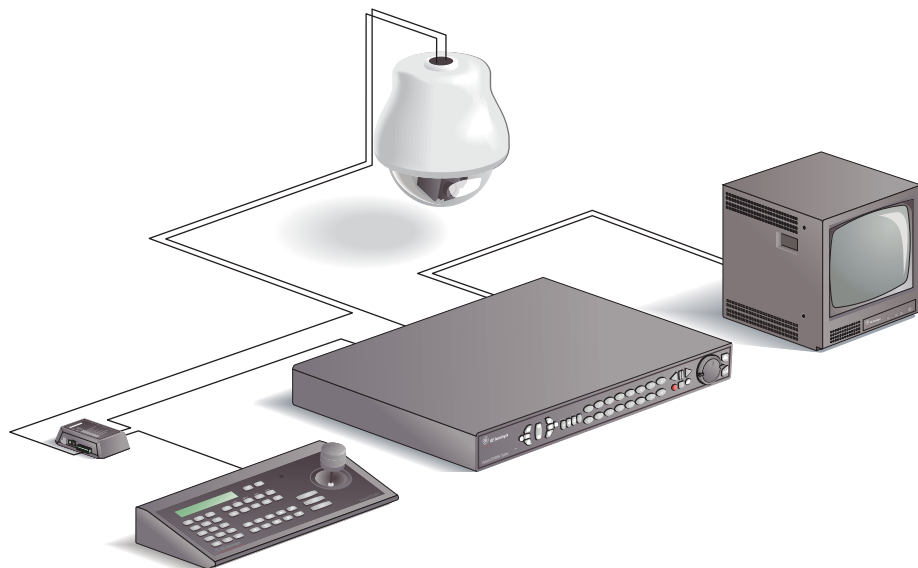
If you have a zone installation, your keypad defaults to **zone mode**. If your keypad is in zone mode, the LCD panel shows zone, camera, and monitor fields.

```
ZONE --
CAMERA --   MONITOR -
```

LCD display of keypad in zone mode

TIP
LCD display: Compare the LCD display for zone mode to the LCD display for Digiplex or hybrid zone mode on page 3.

TIP
System Information: Use page 15 of this document to record the numbers and descriptions of the DVMRes and multiplexers in your system.

NOTE
DVMRe: See page 6 to call up a DVMRe when the keypad is in zone mode.

Basic Digiplex Installation / Digiplex and Hybrid Zone Keypad Modes

If your system uses one or more GE matrix switchers as the main switching devices, then the system is a basic **Digiplex installation**. A Digiplex system can have 512 cameras, one or more matrix switchers with 64 monitor outputs, up to 32 multiplexers, and up to 32 recorders. In addition, optional recording devices (DVMRe, DSR, or VCR) can connect to the matrix switcher. Digiplex systems do not require that the DVMRes have dedicated monitors.
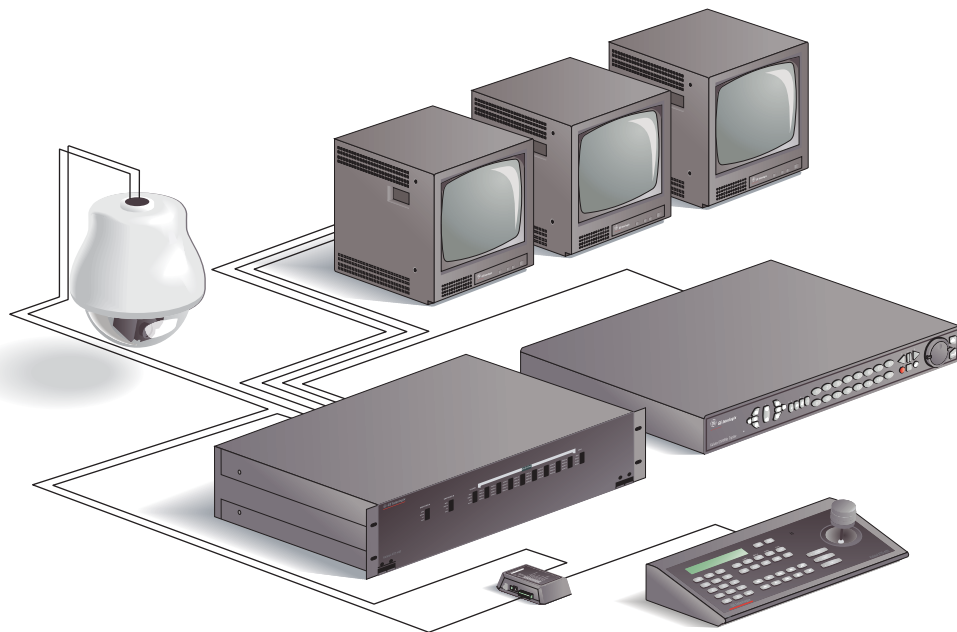
If you have a Digiplex installation, your keypad defaults to **Digiplex mode**. If your keypad is in Digiplex mode, it shows the active camera and monitor numbers.

```
CAMERA 0
MONITOR 1
```

LCD display of keypad in Digiplex mode

You can use the keypad to control a DVMRe in a Digiplex installation (see page 6). In this case, the keypad is in **"hybrid" zone mode**. If your keypad is in hybrid zone mode it shows zone, camera, and monitor numbers, and the DVMRe type.

```
ZONE 01    DVMRe TRI
CAM --     MON A  ESC=EXIT
```

LCD display of keypad in hybrid zone mode

TIP
LCD display: Compare the LCD display for Digiplex and hybrid modes to the LCD display for zone mode on page 2.

NOTE
DVMRe: See page 6 to call up a DVMRe when the keypad starts in Digiplex mode.

Programming and Controlling a CyberDome

Selecting a camera

There are two methods for camera selection. For example, to select camera 1 perform one of the following.

- If you have fewer than ten cameras, press *1*; if you have tens of cameras, press *0,1*; if you have hundreds of cameras, press *0,0,1*.

- Press *1*, ↵.

Programming presets

Move the camera to the desired position.

- *Standard presets:* Press *store*, <preset number>, *store* to store presets.
- *Autopan limits:* Press *store*, ◀❚❚ or ❚❚▶, *store* to set autopan limits.
- *Quick store:* Press *store*, [*aux 1 – 4*], *store* to store preset positions 58 – 61.

Calling up a preset

To move a CyberDome camera to a preset position, press *find* then <preset number>.

Calling up a tour

To initiate on a CyberDome camera a previously programmed tour, press *tour* then <tour number>.

Selecting a Monitor
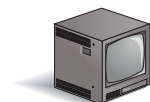
There are two methods for monitor selection. For example, to select monitor 1 perform one of the following.

- If you have fewer than ten monitors, press *1*; if you have tens of monitors, press *0*, *1*; if you have 100 – 128 monitors, press *0*, *0*, *1*.

- Press *mon, 1*, ↵.

TIP
Presets:

- CyberDome cameras can store up to 32 (numbered 00 – 31) or 64 (numbered 00 – 63) preset positions, depending on the camera model.

- Preset numbers 62 and 63 are reserved for autopan limit settings.

- If you are going to reprogram a large number of existing presets, it is advisable to clear all presets stored in memory.

Controlling a Matrix Switcher

Viewing a camera on a specific monitor
At the default keypad menu, enter the monitor number then the camera number. See page 4 for camera and monitor number entry methods.

Initiating sequence tours
To initiate a camera sequence, press *seq* then <sequence routine number 1 - 7>.

Initiating group sequences
① Press *esc* + *zone*.

② At the prompt, press *tour*.

③ At the prompt, enter the group sequence number. For single digit numbers, press <number key>, ↵. For double digit numbers, press <first digit key>, <second digit key>.

Enable or disable alarm mode for a monitor
Press (alarm). If the alarm mode is enabled, **A** appears on the affected monitor.

TIP
Sequence tours: In order to view sequence tours, your system must include a KTD-440 and you must program the KTD-440 with one or more sequence routines.

TIP
Group sequences: In order to initiate a group sequence, you must first program the sequence at the matrix switcher.

Controlling a DVMRe

Calling up a DVMRe in a Digiplex installation
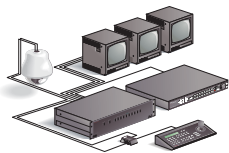
To select a DVMRe when in Digiplex mode, perform the following.

❶ Press *zone*. The keypad switches to hybrid zone mode.

❷ Enter the DVMRe/zone number.

Calling up a DVMRe in a zone installation
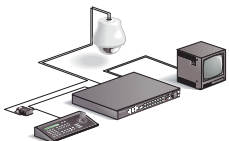
To select a DVMRe when in zone mode, perform the following.

❶ Press *zone*.

❷ Enter the zone number.

Calling up multiscreen views on a Triplex or DVMRe (zone or hybrid zone mode only)
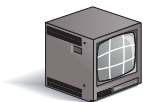
- Press *view*, <number keys 1 to 9>
  or
- Press *view*, *5* repeatedly to step through the available views.

Calling up multiscreen views on other DVMRe models and multiplexers

Press *view* repeatedly to step through the available views.

NOTE
System information: You must know the DVMRe/zone number to call a DVMRe from the keypad. If you don't know that information, contact your system installer, integrator, or administrator and record that information on page 15.

TIP
Hybrid Zone mode:
- Press *esc* to return from hybrid zone mode to Digiplex mode.
- You do not have PTZ control of cameras in hybrid Zone mode.

TIP
Error: The keypad beeps when you enter a zone number if that zone number does not exist or the keypad is not communicating with the DVMRe.

Searching Recorded Events on a DVMRe

To initiate a search, press ✎. The **Disk Analysis Screen** appears on the monitor. The default view shows the entire time period currently saved on the disk.


```
Disk Analysis Screen          01/21/2003  20:17:01
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
■Alarm   Event ■Activity ■Videoloss ■Present  Absent
Hit SEARCH again to enter Advanced Search    Level 1
```
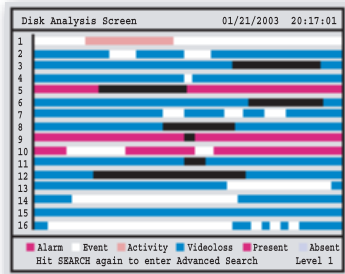
Disk Analysis Screen

- To scroll forward or backward in disk time push the joystick up or down, or press *esc* + ‖ or *esc* + ▶. The black indicator arrows move left and right to show the selected time.

- To view shorter or longer spans of time, push the joystick left or right, or press ◀◀ or ▶▶. There are four view levels.

- To view playback of the currently selected time period, press ↵.

- To specify search parameters, press ✎. The **Motion Search** menu appears.

At the **Motion Search** menu, select a time parameter.


```
Motion Search

☐ Last 2hrs
☐ Last 8hrs
☐ Last day
☐ Last 7 days
☐ Last 4 weeks
☐ Last 12 weeks
☒ Custom
```

Motion Search menu

- To navigate through the options push up or down on the joystick, or press *esc* + ‖ or *esc* + ▶.

- To select an option push left or right on the joystick, or press *esc* + ◀‖ or *esc* + ‖▶. You can select only one option at a time.

- To initiate a search on a selected preset time parameter, press ↵. Playback begins and the motion search setup screen appears.

- To customize a time period to search, select **Custom** and press ↵. The custom time menu appears.

- To apply filters to a custom or preset time parameter, press ✎. The Search Filters menu appears.

At the **custom time menu**, customize a time period to search.


```
DATE (MM/DD/YY)     TIME (HH:MM)
Start     Stop     Start    Stop
01/27/03 01/27/03  20:57    20:59
```

Custom time menu

- To navigate through the date and time fields, push left or right on the joystick, or press *esc* + ◀‖ or *esc* + ‖▶.

- To change settings for each option press *esc* + ‖ or *esc* + ▶.

- To accept the customized time settings press ↵. Playback begins and the motion search setup screen appears.

Continued on next page...

TIP
Exiting Search mode: To exit the search function, continue pressing *esc* until all search menus disappear from the monitor.

Searching Recorded Events on a DVMRe, continued

Search Filters menu

At the **Search Filters** menu, select custom search parameters.

- To navigate up and down through the main options in the left column, push up or down on the joystick, or *esc* + ▮▮ or *esc* + ▶.
- To select or deselect a box in the left column, push right on the joystick or press *esc* + ▮▮▶. If you select a box, the right column for that item becomes editable.
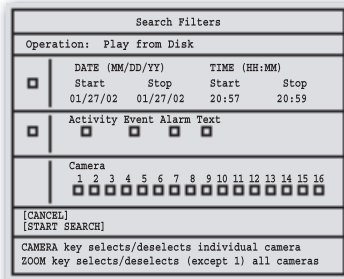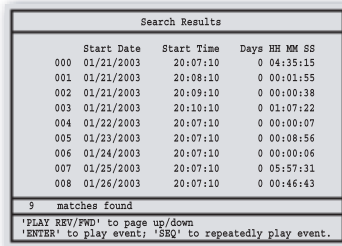
- In the right column, to navigate through the editable options, push left or right on the joystick, or press *esc* + ◀▮▮ or *esc* + ▮▮▶. To change settings push up or down on the joystick, or press *esc* + ▮▮ or ▶. To accept settings press ⏎. The left column becomes active.
- To select or deselect cameras, press the number keys. For single digit camera numbers press <number key>, ⏎. For double digit camera numbers press <first digit key>, <second digit key>. Press 🔍 to toggle between selecting all cameras or only camera 1.
- To initiate the search, select **START SEARCH** and press ⏎ The appropriate Search Results menu appears.

Motion search setup screen

At the **motion search setup** screen, enable or disable areas for motion detection.

- To move the selection box around the screen, use the joystick.
- To toggle the selection box between active and neutral mode, press ▮▮. If the box is in active mode, a ✔ appears in the box. Move the box over areas you want to enable for motion detection.

- To toggle a selected block between disabled and neutral mode, press ▪. If the selection box is in disabled mode, an ✖ appears in the box. Move the box over areas you want to disable for motion detection.
- To start the search, press ⏎. The appropriate Search Results menu appears.

Searching Recorded Events on a DVMRe, continued

At either **Search Results** menu, select an entry.
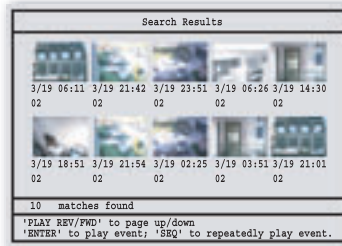
*Activity, text, motion, and alarm
Search Results menu*

Time/date Search Results menu

- If your search produced no results, press ⟋ to return to the Search Filters menu.
- To scroll through the results, use the joystick, or press *esc* + ‖ or *esc* + ▶.
- To play a selection, press ↵.
- During playback, to set an event replay continuously, press *seq*. "Repeat" appears at the top of the monitor screen.
- During playback, to return to the Search Results menu, press ⟋.
- To stop playback, press ■.

Key Descriptions and Operation

DSR, VCR, DVMRe, or Multiplexer Selection

(dsr/vcr) Press ***dsr/vcr***, <device number> in Digiplex mode to address a remote recording device (other than a DVMRe).

(zone) Press ***zone,*** <zone number> in Zone or Digiplex mode to select a DVMRe.

DSR, VCR, DVMRe, or Multiplexer Operation

● Start record mode.

■ Stop record or playback mode.

▶ Start playback mode.

❚❚ Pause playback.

▶▶ Fast forward playback.

◀◀ Rewind playback.

❚❚▶ *Playing in reverse:* shift to forward play.

In pause mode: step playback forward one frame.

◀❚❚ *Playing forward:* shift to reverse play.

In pause mode: step playback in reverse one frame.

🔍 Toggle between 2X zoom and normal view.

✍ Initiate a search on a DVMRe.

(view) • Step selected monitor through programmed multiplexer multiscreen views. If using a Triplex™ multiplexer, press ***view***, [1 – 9] to select a view (see page 6)

• For newer model cameras, hold for 3 seconds to view camera name and number.

Joystick

   In play or pause mode:

   • Right: fast forward.

   • Left: rewind.

   • Up/Down: skip forward/backward frame by frame.

   • Twist right: step forward at a variable rate.

   • Twist left: step in reverse at a variable rate.

   • Return to center: resume pause mode.

   With 2X magnification on:

   • Right: pan right.

   • Left: pan left.

   • Up/Down: pan up or down.

TIP
Keypad instruction conventions:

• "," separates keys to be pressed in succession.

• "+" separates keys to be pressed simultaneously.

• "<>" indicates numerical addresses or indicators to be entered on the number keypad.

• "[]" indicates variable names for keys.

Key Descriptions and Operation, continued

Other Keys

`mon` • Press to select monitor (see page 4)
• Press and hold for three seconds to view keypad information.

0 – 9 Use in combination with other keys to select camera, monitor, zone, preset, etc.

`esc` • Refresh the monitor display.

• Clear an alarm.

• Clear a number entry if required number of digits are not yet entered.

• *esc* + [key] for shifted function.

• *esc* + *mon* for key function help.

• *esc* + *iris +/-* to change the backlight brightness on the keypad display.

`←┘` Press ←┘ and hold until you hear a tone to enter the password menu and begin programming mode.

`1ST` Press *1st* to call up the first site in the annunciation queue.

`auto focus` Press *auto focus* to place the selected CyberDome camera in auto focus mode.

`aux X` Field programmable keys for various site-specific applications (the default assignment is printed above the keys).

`seq` Select a multiplexer/switcher sequence tour on the active monitor.

`alarm` In Digiplex mode, toggle alarm mode between on and off for the current monitor. In zone mode, clear all alarms.

`tour` • Press *tour*, <tour number> to place a CyberDome or PTZ receiver in tour mode.

• Press *tour* and hold until you hear a tone to set autopan mode for the current camera.

`store` • Press *store*, <preset number>, *store* to store presets.

• *Autopan limits:* Press *store*, ◀|| or ||▶, *store* to set autopan limits.

• *Sequence Programming (Zone mode only):* Press *store*, *seq* to access sequence programming for Calibur multiplexers.

• *Quick store:* Press *store* , [*aux 1 – 4*], *store* to store preset positions 58 – 61.

`find` • Press *find* , <number keys> to view preset camera positions.

• *Quick find:* Press *find*, [*aux 1 – 4*] to view preset positions 58 - 61.

`+ zoom -` Controls the zoom function on selected receiver site's motorized lens.

`+ zoom -` • Controls the focus function on selected receiver site's motorized lens.

• Temporarily disables the auto focus feature on a CyberDome. Any joystick movement re-enables autofocus.

`+ iris -` Controls the iris function on the selected receiver site's motorized lens.

KTD-405A Only

talk (*aux 4*) Press to talk from keypad to receiver location.

`face` Press to select KTR-11 Face Camera.

`badge` Press to select KTR-11 Badge Camera.

`over` Press to select KTR-11 Overview Camera.

`vol▲` Press to adjust volume level up.

`vol▼` Press to adjust volume level down.

Key Descriptions and Operation, continued

Shifted Key functions

To access shifted functions, press *esc* + [key].

`mon`	help
`zone`	group
`1ST`	macro
`auto focus`	autopan
`aux1`	unlock
`aux2`	lock
`aux3`	flip
`aux4`	stabilize
`seq`	function
`store`	group
`find`	step
`face`	card
`badge`	door 1
`over`	door 2
`vol▲`	slow
`vol▼`	fast

◀❚❚	joystick left
❚❚	joystick up
❚❚▶	joystick right
■	live
🔍	light
◀◀	site down
▶	joystick down
▶▶	site up
●	home
⊘	0 lux
`+ zoom -`	
	volume up/down
`+ iris -`	
	backlight bright/dim

Joystick

Control the selected camera:

- Pan: move the joystick left or right
- Tilt: move the joystick up or down
- Zoom: twist the joystick knob clockwise or counterclockwise.

Input/Output box connections

Terminal strip connections:

EARTH GROUND: To ground.

RS485 A/B: To and from a DVMRe or additional keypad. Observe polarity. (Optional; use if you do not use the RJ45 connection.)

RS422 IN A/B: In from an upstream Digiplex device such as an RS422 keypad, alarm chassis, ASCII converter or time/date generator. Observe polarity.
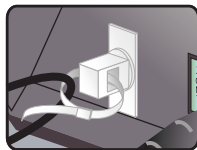
RS422 OUT A/B: Out to downstream matrix switchers and PTZ cameras; can also connect to Digiplex controllers or ASCII converters. Observe polarity.

SPEAKER SHIELD, SPEAKER: To speaker (if used; KTD-405A only).

> **CAUTION**
> **Bias switch:** Unless the system includes a bridge connection using fiber or Ethernet, turn on the bias switch for only one keypad per system.

> **CAUTION**
> **Earth ground:** For surge protection you can connect to ground at every I/O box.
> **RS485 Shield:** Ground at only one end of each continuous segment of shield.

Bias switch:
Use to load the RS485 line appropriately. Slide the switch up for the ON position.

Power cable:
For safety, use a tie-wrap to secure the power cable to the tie-in.

Input/Output box connections, continued

RJ11 and RJ45 Connections

AUDIO:
Connect the RJ11 cable from the keypad. (KTD-405A only; this is a cross-over cable.)

KEYPAD:
Connect the black RJ45 cable from the keypad. (This is a straight-through cable.)

RS485:
These are optional connectors for systems that include multiplexers or DVMRes with RJ45 connectors.
The pin out the RJ45 connectors as follows:

• Pin 3 = RS485 A

• Pin 6 = RS485 B

(On the terminal strip on the other side of the I/O box, there is also one RS485 connection.)

System Information

Number: **Description:**

     _____   _____

Other system notes: